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10/627,915	07/28/2003	Koichi Yoshimura	116673	3625
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/627,915	YOSHIMURA ET AL.	
	Examiner Michael D. Pham	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,7,8,14-16 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,7,8,14-16 and 21-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/29/07 has been entered.

Status of claims

2. Claims 1, 7, 8, 14-16, and 21-23 are pending.
3. Claims 1, 8, 15, 16 have been amended and 22-23 are new.

Priority

4. The application has been examined with an effective filing date of 7/28/03 for the following reasons: While some of the certified documents have been received; an official translation has not been provided.

Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 8, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,761,496 by Hattori (hereafter Hattori) further in view of U.S. Patent application publication 2002/0001099 by Okuda et. al. (hereafter Okuda).**

Claim 1:

Hattori discloses the following claimed limitations:

“A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance; and” [col. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]

“A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria;” [col. 10 lines. 53-55, retrieval result output section outputs final retrieval results.]

“Wherein when it is judged that a number of one or more services included in the result of the first retrieval has not reached a lower limit number set as the judgment criteria, the

retrieval unit changes the retrieval condition to be wider to perform the second retrieval and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed" [col. 23 lines 10, retrieval management section (judged). Col. 23 lines 25-28, If the estimated number of retrieval count (a number of one or more services included in the result of the first retrieval) does not fall between the specified minimum and specified maximum retrieval, and the retrieval expression is modified repeatedly until the condition is satisfied. Col. 23 line 19, retrieval parameter K as the threshold (e.g. lower limit number set as the judgment criteria). Col. 23 lines 23-24, the retrieval parameter K is modified (e.g. the retrieval unit changes the retrieval condition). Col. 23 lines 30-35, K indicates how restrictive the retrieval condition is. This is as the value of retrieval parameter K becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database decreases. Col. 24 lines 30-43, if the estimated retrieval count is greater than the minimum retrieval count and less than the maximum retrieval count. Hence the retrieval condition is set so as to be wider.]

"A retrieval unit that sets a retrieval condition according to the request the client and performs a first retrieval over the network based upon the set retrieval condition" [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition. Col. 14 l. 32-40, network]

Hattori does not explicitly disclose

“A retrieval unit that sets a retrieval condition according to the request from the client and performs a first retrieval over the network for at least one of a print service and a scan service based upon the set retrieval condition;”

On the other hand, Okuda discloses 0142, accessing the print service server by a user to search a print service shop and select the shop. 0144, shop search conditions are designated. Figure 1 discloses a user terminal, print service server, and print service shop with connections via internet. Hence, Okuda fully discloses the limitation “A retrieval unit that sets a retrieval condition according to the request from the client and performs a first retrieval over the network for at least one of a print service and a scan service based upon the set retrieval condition”. That is a retrieval unit that sets a retrieval condition (e.g. print service server) according to the request from the client (user) and performs a first retrieval over the network (internet).

Both Hattori and Okuda are directed to searching systems, and therefore within same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Okuda’s teaching’s of a searching for print service to Hattori’s system for the purpose of improving Hattori’s search system by providing a printing service. Hattori’s system improves Okuda’s print service system by further finding relevant printing services.

Claim 8:

Hattori discloses the following claimed limitations:

“A retrieval unit that executes a first retrieval over the network for a service according to the set retrieval range for the request”[figure 1, retrieval management section. Retrieval expression from input keywords, which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition. And c. 22 l. 60-65 and c. 23 l. 25-39, user is able to set a minimum and maximum data count, retrieval expression may be modified. Col. 14 l. 32-40, network];

“A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgment criteria set in advance; and” [col. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]

“A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria;” [col. 10 lines. 53-55, retrieval result output section outputs final retrieval results.]

“Wherein, when it is judged that the result of the retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval conditions and performs a second retrieval over the network”[c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression]; and

“When it is judged that a number of one or more services included in the result of the first retrieval does not reach a lower limit number set as the judgment criteria, the retrieval unit changes the retrieval conditions to be wider to perform the second retrieval and performs the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval is performed.” [col. 23 lines 10, retrieval management section (judged). Col. 23 lines 25-28, If the estimated number of retrieval count (a number of one or more services included in the result of the first retrieval) does not fall between the specified minimum and specified maximum retrieval, and the retrieval expression is modified repeatedly until the condition is satisfied. Col. 23 line 19, retrieval parameter K as the threshold (e.g. lower limit number set as the judgment criteria). Col. 23 lines 23-24, the retrieval parameter K is modified (e.g. the retrieval unit changes the retrieval condition). Col. 23 lines 30-35, K indicates how restrictive the retrieval condition is. This is as the value of retrieval parameter K becomes closer to 1, the retrieval condition becomes more restrictive and the number of data items retrieved from the database decreases. Col. 24 lines 30-43, if the estimated retrieval count is greater than the minimum retrieval count and less than the maximum retrieval count. Hence the retrieval condition is set so as to be wider. As shown in col. 24 lines 41-43, if the initial retrieval parameter K is .5 and the minimum and maximum value of the retrieval parameters are 0 and 1, respectively, the maximum value of the retrieval parameter is changed from 1 to 0.5, and the value K is changed from .5 to 0.25 (range excluding a range for which the first retrieval was performed). Hence, K is now .25 and the range is from 0 to .5 thereby, excluding the range of .5 to 1. c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies

retrieval parameters, generates a new retrieval expression (performs second retrieval with a new retrieval)]

Hattori does not explicitly disclose “at least one of a print service and a scan service” and “sub-networks”. Therefore, Hattori does not explicitly disclose

“A service information database that stores service information including address information and installation position information of the server and attribute information of at least one of a print service and a scan service provided by the server;”

“A service retrieval apparatus database that, when the network is divided into a plurality of sub-networks, stores address information and installation position information of a service retrieval apparatus with each sub-network included in a retrieval range;”

“A retrieval range setting unit that, by retrieving the service retrieval apparatus database based upon inputted retrieval conditions, specifies one or more service retrieval apparatuses conforming to the retrieval apparatuses, as a retrieval range for the request;” alone.

On the other hand, Okuda discloses the following claimed limitations:

“A service information database that stores service information including address information and installation position information of the server and attribute information of at least one of a print service and a scan service provided by the server;” [figure 4 and 22 and paragraph 0067. In 0067, contract information unit manages data including each contracted user attribute (user name, address, contact location or the like). Hence, 0067 suggests “service

information database that stores service information including address information". Figure 22 discloses locationID, time service, shop id, and status in a shop information table, hence suggesting "service information database that stores service information including installation position information of the server and attribute information of at least one of a print service or scan service provided by the server"]

"A service retrieval apparatus database that, when the network is divided into a plurality of sub-networks, stores address information and installation position information of a service retrieval apparatus with each sub-network included in a retrieval range;" [figure 1, element 100. Figure 1, internet. 0067, address. Figure 22, Location ID, figure 21 element 2103. Hence, in figure 1 element 100 (a service retrieval apparatus database that,), figure 1 Internet (when the network is divided into a plurality of sub-networks), 0067 address (stores address information), Figure 22 Location ID (stores installation position information of a service apparatus), Figure 1 Internet (with each sub-network), Figure 21 element 2103 search results (included in a retrieval range) discloses the limitation.].

"A retrieval range setting unit that, by retrieving the service retrieval apparatus database based upon inputted retrieval conditions, specifies one or more service retrieval apparatuses conforming to the retrieval apparatuses, as a retrieval range for the request;" [Figure 1 element 102, Element 100, Figure 21 element S2101-S2103. Hence, in Figure 1 element 102 user terminal (retrieval range setting unit that,), Figure 1 element 100 Print service server (by retrieving the service retrieval apparatus database), Figure 21 S2101 designate conditions for shop search (based upon inputted retrieval conditions), Figure 21 element 2102 search shop info

in server for desired shop (specifies one or more service retrieval apparatuses conforming to the retrieval apparatuses), Figure 2103 search results (as a retrieval range for the request)]

Both Hattori and Okuda are directed to searching systems, and therefore within same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Okuda's teaching's of a searching for print service and internet to Hattori's system for the purpose of improving Hattori's search system by providing a printing service over a network. Hattori's system improves Okuda's print service system by further finding relevant printing services.

Claim 16:

Hattori discloses the following claimed limitations:

“Setting a retrieval condition in response to a request of the client;” [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition.]

“Judging whether or not a result of the first retrieval satisfies judgment criteria set in advance;” [c. 7 l. 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]

“Returning the result of the retrieval which is judged to satisfy the judgment criteria to the client; and” [c. 10 l. 53-55, retrieval result output section outputs final retrieval results.]

“When it is judged that the result of the retrieval does not satisfy the judgment criteria, changing the retrieval condition to perform a second retrieval over the network, and” [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 l. 32-40, over a network]

“When it is judged that a number of one or more services included in the result of the first retrieval does not reach a lower limit number set as the judgment criteria, changing the retrieval condition to be wider to perform the second retrieval with respect to a new retrieval range excluding a range for which the first retrieval was performed.” [col. 23 lines 10, retrieval management section (judged). Col. 23 lines 25-28, If the estimated number of retrieval count (a number of one or more services included in the result of the first retrieval) does not fall between the specified minimum and specified maximum retrieval, and the retrieval expression is modified repeatedly until the condition is satisfied. Col. 23 line 19, retrieval parameter K as the threshold (e.g. lower limit number set as the judgment criteria). Col. 23 lines 23-24, the retrieval parameter K is modified (e.g. the retrieval unit changes the retrieval condition). Col. 23 lines 30-35, K indicates how restrictive the retrieval condition is. This is as the value of retrieval parameter K becomes closer to 1, the retrieval condition becomes more restrictive and the

number of data items retrieved from the database decreases. Col. 24 lines 30-43, if the estimated retrieval count is greater than the minimum retrieval count and less than the maximum retrieval count. Hence the retrieval condition is set so as to be wider.]

Hattori does not explicitly disclose "Performing a first retrieval over the network for at least one of a print service and a scan service based upon the retrieval condition" alone.

On the other hand, Okuda discloses "performing a first retrieval over the network for at least one of a print service and a scan service based upon the retrieval condition" [figure 1 and figure 21. Figure 21 element 2101-2102, Designate conditions for shop search and search shop info in server for desired shop (performing a first retrieval for at least one of a print service and a scan service based upon retrieval condition). Figure 1 Internet (over the network)]

Both Hattori and Okuda are directed to searching systems, and therefore within same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Okuda's teaching's of a searching for print service and internet to Hattori's system for the purpose of improving Hattori's search system by providing a printing service over a network. Hattori's system improves Okuda's print service system by further finding relevant printing services.

Claim 22:

Hattori discloses the following claimed limitations:

“A retrieval unit that sets a retrieval condition with respect to a retrieval range according to the search request from the client” [figure 1, retrieval management section. Retrieval expression from input keywords which are entered as retrieval request and relational keywords based on background knowledge, and based on this retrieval expression, execute the retrieval. Retrieval result condition previously setup checks if the retrieval expression meets the retrieval result condition.]

“A retrieval result judgment unit that judges whether or not a result of the first retrieval satisfies judgments criteria set in advance; and” [col. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression]

“A retrieval result output unit that outputs the result which is judged to satisfy the judgment criteria; wherein” [col. 10 lines. 53-55, retrieval result output section outputs final retrieval results.]

“When it is judged that the result of the first retrieval does not satisfy the judgment criteria, the retrieval unit changes the retrieval range and performs a second retrieval over the network.” [c. 7 lines 28-30, if temporary retrieval result obtained through execution of retrieval expression does not satisfy a retrieval result condition set up by user the system modifies retrieval parameters, generates a new retrieval expression. Col. 14 l. 32-40, over a network]

However, Hattori does not explicitly disclose “and performs a first retrieval for at least one of a print service and a scan service based upon the set retrieval condition, the retrieval range indicating a sub-network of the network subjected to the first retrieval” alone.

On the other hand, Okuda discloses “and performs a first retrieval for at least one of a print service and a scan service based upon the set retrieval condition, the retrieval range indicating a sub-network of the network subjected to the first retrieval” [figure 1 and figure 21. Figure 21 element 2101-2102, Designate conditions for shop search and search shop info in server for desired shop (performs a first retrieval for at least one of a print service and a scan service based upon the set retrieval condition). Figure 21 element 2103 (retrieval range indicating) Figure 1 Internet (a sub-network of the network subjected to the first retrieval)] and “over a network” figure 1 Internet.

Both Hattori and Okuda are directed to searching systems, and therefore within same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Okuda’s teaching’s of a searching for print service and internet to Hattori’s system for the purpose of improving Hattori’s search system by providing a printing service over a network. Hattori’s system improves Okuda’s print service system by further finding relevant printing services.

Claim 23:

Hattori discloses the following:

“If the search request from the client includes neither the retrieval range nor a retrieval target area” “, the retrieval unit judges whether or not” a data “to be retrieved is” a data that is important. [col. 7 lines 28-35, if a temporary retrieval result obtained through execution does not satisfy a retrieval result condition set up by the user, the system modifies retrieval parameters, generates a new retrieval expression, and based on this retrieval expression, executes retrieval again allowing the user to retrieve data which reflects the user’s retrieval strategy and background knowledge]

Hattori does not explicitly disclose:

“a service”

“for which a geographical condition is important”

“If the service to be retrieved is the service for which the geographical condition is judged to be important, the retrieval unit sets an area which is geographic vicinity as the retrieval range of the first retrieval” alone.

On the other hand, Okuda discloses Abstract, a print service system (a service). 0144, search conditions may be shop location (for which a geographical condition is important). Figure 21 element 2102 search shop info in server for desired shop (if service to be retrieved is the service), 0144 search conditions may be shop location (for which the geographical condition is judged to be important), Figure 1 element 100 print service server (the retrieval unit sets), 0144, condition may be shop location (area which is geographic vicinity), Figure 21 element 2103 inform user of search results (retrieval range of the first retrieval).

Both Hattori and Okuda are directed to searching systems, and therefore within same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Okuda's teaching's of a searching for print service and internet to Hattori's system for the purpose of improving Hattori's search system by providing a printing service over a network. Hattori's system improves Okuda's print service system by further finding relevant printing services.

7. Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,761,496 by Hattori (hereafter Hattori) and U.S. Patent application publication 2002/0001099 by Okuda et. al. (hereafter Okuda) further in view of U.S. Patent 6,498,612 by Brown et. al. (hereafter Brown).

Claim 7:

Hattori and Okuda do not explicitly disclose "a reply unit that rearranges the result of the retrieval based upon values with respect to attribute items included in the retrieval condition, and then returns the result of the retrieval to said client" alone.

On the other hand, Brown discloses the following in the abstract, retrieving the display specifier (retrieval condition). That the display information for an object is contained in a display specifier. That the user interface (result of retrieval) can be extended by changing (rearranging) the information, i.e. software pointers (attributes), contained in the display

specifier. Accordingly, Brown discloses rearranging the result of the retrieval with respect to attribute items included in the retrieval condition, and returning the rearranged result of the retrieval to the client.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the display specifier of Brown as disclosed above to the disclosure of Hattori and Okuda in order to provide changes to a user interface from a central location and propagate it across a network. In doing so changing a resulting display avoids the cost of inadvertent error in rearranging/modifying results of a display.

Claim 14:

Hattori and Okuda do not explicitly disclose “a reply unit that rearranges the result of the retrieval based upon values with respect to attribute items included in the retrieval condition, and then returns the result of the retrieval to said client” alone.

On the other hand, Brown discloses the following in the abstract, retrieving the display specifier (retrieval condition). That the display information for an object is contained in a display specifier. That the user interface (result of retrieval) can be extended by changing (rearranging) the information, i.e. software pointers (attributes), contained in the display specifier. Accordingly, Brown discloses rearranging the result of the retrieval with respect to attribute items included in the retrieval condition, and returning the rearranged result of the retrieval to the client.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the display specifier of Brown as disclosed above to the disclosure of Hattori and Okuda in order to provide changes to a user interface from a central location and propagate it across a network. In doing so changing a resulting display avoids the cost of inadvertent error in rearranging/modifying results of a display.

Claim 21:

Hattori and Okuda do not explicitly disclose “rearranging the result of the retrieval with respect to attribute items included in the retrieval condition, and returning the rearranged result of the retrieval to the client” alone.

On the other hand, Brown discloses the following in the abstract, retrieving the display specifier (retrieval condition). That the display information for an object is contained in a display specifier. That the user interface (result of retrieval) can be extended by changing (rearranging) the information, i.e. software pointers (attributes), contained in the display specifier. Accordingly, Brown discloses rearranging the result of the retrieval with respect to attribute items included in the retrieval condition, and returning the rearranged result of the retrieval to the client.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the display specifier of Brown as disclosed above to the

disclosure of Hattori and Okuda in order to provide changes to a user interface from a central location and propagate it across a network. In doing so changing a resulting display avoids the cost of inadvertent error in rearranging/modifying results of a display.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,761,496 by Hattori (hereafter Hattori) further in view of U.S. Patent 6,498,612 by Brown et. al. (hereafter Brown).

Claim 15:

Hattori discloses the following claimed limitations:

“Retrieval result receiving means for receiving a retrieval result sent from said” “retrieval apparatus in response to the retrieval request;” [Hattori, c. 10 l. 53-55, retrieval result output section outputs final retrieval results.]

“Selection means for selecting one or more attribute items, magnitudes of which can be compared, from attribute items included in retrieval conditions of the service; and” [Hattori discloses retrieval based upon values with respect to attribute items included in the retrieval condition (Hattori, c. 11 l.39-61), retrieval request has a retrieval request consisting of an attribute, the value of the attribute, and its importance degree; and returning the result of the retrieval to client (Hattori, retrieval result output, col. 10 lines 53-55)]

“wherein the rearranging is executed when the plurality of items of” “information exceeds a number set in advance, and” [col. 24 lines 30-43, if the estimated retrieval count is greater than the minimum retrieval count and less than the maximum retrieval count. Col. 23

lines 28-29, Retrieval expression is modified (rearranging) repeatedly until the condition is satisfied. That is, if retrieval parameter K exceeds a minimum retrieval count (number), then the expression is modified (rearranged).]

Hattori does not explicitly disclose

“service”

“the service is at least one of a print service and a scan service”

“Output means for rearranging a plurality of items of service information included in the retrieval result based upon value of the attribute items selected by said selection means included in each item of service information to output the service information,

On the other hand, Brown discloses, col. 1 line 17, directory services (service). Brown discloses col. 2 lines 17-20, administrator wants to add a new scanner resource to the network and make that scanner resource available to all of the network users, information about the scanner should be published in the directory (the service is at least one of a print service and a scan service). Brown discloses user interface (output means) must be provided for network users to access and view attributes of the network resources (plurality of items of service information). col. 3 lines 28-31, changes or additions to the user interface software modules or data records (re-arranging a plurality of items of service information) are propagated to all workstations that access the display database or software modules. Col. 3 lines 5-8, storing user interface information in a display database, preferably part of a directory services database stored on a server, and then coupling that user interface information to the data it will display (based upon

value of the attribute items selected by selection means included in the service information to output the service information).

Response to Arguments

9. Applicant's arguments with respect to claims 1, 7, 8, 14-16, and 21-23 have been considered but are moot in view of the new ground(s) of rejection. Applicant's assert the following (lettered):

A. That the applied references fail to disclose "at least one of a print service and a scan service"

In response, moot in view of the new ground(s) of rejection.

B. In regards to the applied references fail to disclose the retrieval unit changes the retrieval condition so as to be wider when it is judged that a number of one or more services included in the result of the first retrieval has not reached a lower limit number set as the judgment criteria, and performs the second retrieval with respect to a new retrieval range excluding a range which the first retrieval is performed.

In response, the applicant is respectfully directed to col. 24 lines 30-43, step 2560. Please see above rejection. As applicant's and examiner agree, when the retrieval parameter K is closer to 1 the retrieval condition becomes more restrictive and the number of data items decreases. This suggests that if K is closer to zero, the retrieval condition becomes less restrictive and the number of data items increases. Thus if the estimated retrieval count is less than the minimum retrieval count in step 2560. For example, if the initial value of retrieval parameter K is .05 and the minimum value and maximum value of the retrieval parameter is 0 and 1, respectively the

maximum value of the retrieval parameter is changed from 1 to 0.5 and the value of the retrieval parameter is changed from 0 to .25. Thus excluding the range from 0.5 to 1, and providing a wider retrieval condition.

C. The applied references fail to disclose or suggest that rearranging is executed when the plurality of items of service exceeds a number set in advance.

In response, moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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